Archives of Emergency Medicine, 1993, **10**, 193–196

The injured motor cycle messenger

D. I. S. SWEETNAM, F. MORRIS & A. COPE
Orthopaedic Department, Royal United Hospital, Combe Park, Bath, Avon

SUMMARY

Injured motor cycle messengers make up a small but significant proportion of the young injured attending Central London accident and emergency (A&E) departments. The study confirms that the pattern of their injuries is similar to other injured urban motor cyclists, and discusses the background of the injured, in terms of experience and training, highlighting the frequency of injury and possible predisposing factors.

A total of 116 injured motor cycle messengers attending two Central London A&E departments over a 10-month period were studied. Thirteen per cent sustained sufficiently serious injuries to necessitate admission, the rest were treated as out-patients for lesser injuries. The mean age was 23. Only 18% had received any formal training and 31% were in possession of a provisional driving licence only. Fifty-eight per cent had been employed as a messenger for less than 3 months, yet two-thirds of them had sustained a previous injury whilst a messenger. The apparent absence of supervision of this potentially dangerous occupation is emphasized.

In view of the repeated injuries sustained by many of these vulnerable young men, it is suggested that those responsible for their treatment might, in addition to their therapeutic role, give suitable guidance that might prevent re-attendance with further injuries.

INTRODUCTION

It has been estimated that more half the motor cyclists in Central London, apart from commuters, are employed as couriers. It is difficult to obtain details of their employment, but most motorists will have observed that their driving suggests the importance they attach to making deliveries as quickly as possible. Sometimes,

Correspondence: D. I. S. Sweetnam, Orthopaedic Department, Royal United Hospital, Combe Park, Bath, Avon BAl 3NG.

risks that result in injury may be taken. This paper is an attempt to quantify this risk from the perspective of two Central London A&E departments.

Such a study is difficult for a number of reasons. It is believed that perhaps as many as 5000 couriers may be employed in London alone, however, no official statistics exist, either with the police, insurance companies or the Road Research Laboratory. No data is available on hours of work, terms of employment, mileage, or the number of deliveries per day.

Cope *et al.* (1987) have already drawn attention to the potential, indeed actual, dangers of this occupation, in which young, mainly male, motor cyclists are exposed to additional dangers generated by the apparent necessity for speed and therefore, the acceptance of risk.

METHODS

All consecutive motor cycle messengers brought into the A&E departments of two Central London hospitals (St Bartholomews and University College Hospital) over a 10-month period were entered into the study. Details of age, sex, motor cycling experience, duration of experience as a courier, engine capacity of the motor cycle and whether there was a history of previous motor cycling accidents were noted. Details of full or provisional licence status and whether they had received any training before employment as a motor cycle messenger were obtained. The injuries sustained were recorded. Details of 116 injured couriers were available for analysis. No messenger appeared twice in the study sample, and all cooperated fully in providing the information we required.

RESULTS

The mean age was 23 years and 70% of the couriers were aged 25 years or less. The majority suffered minor soft tissue contusions, sprains, skin abrasions or small lacerations (66%). A much smaller proportion (21%) sustained more serious injury, such as simple fracture, dislocation or larger laceration, but still requiring no more than out-patient management. Major fractures and soft tissue injuries, as well as one patient with a serious head injury, accounted for the remainder (13%), all of whom were admitted for treatment. There were no deaths.

A wide range of motor cycles were used from 50 to 1000 cc. A total of 54 (46%) were less than 250 cc, 31 (27%) were greater than 500 cc. Only 21 (18%) had received any formal training and 36 (31%) were only in possession of a provisional driving licence. Ninety-six (83%) had been motor cycling for more than 1 year, but the majority had been employed as a courier for less than 1 year. Fifty-five (48%) had changed their motor cycle in the last 3 months. Details of previous accidents are summarized in Table 1 and shows that for those employed for less than 3 months, two-thirds had a previous accident. Among the 32 injured after working between 3 and 12 months, no less than 21% had had three or more previous injuries whilst

Table 1. Table of results from 116 couriers. Relationship between experience and number of injuries and number of previous accidents in the last year

Motor cycle messengers	No previous injury	One previous injury	Two previous injuries	Three or more previous injuries
36 employed <3 months	11	18	7	0
32 employed 3–12 months	18	2	5	7
48 employed >1 year	20	11	10	7

employed as a motor cycle messenger. Only 20 of the 48 attending with an injury who had been employed for more than a year had not had a previous injury whilst working as a messenger. Twenty-eight (58%) had previous injuries, 11 once, 10 twice and seven three or more times.

There was no significant association between total number of accidents and either the number of years motor cycling or the power of the motor cycle, or indeed the length of its ownership by the rider. Neither was there any apparent association between the possession of a full or provisional licence, or the receipt of formal training and the incidence of injury. However, there was an association between the total number of accidents and length of time the rider had been a motor cycle messenger $P < 0.01$, $\chi^2 = 22.7$ with 6 degrees of freedom.

DISCUSSION

The results of this survey appear to imply that the number of accidents that motor cycle messengers sustain in the course of their work is not related to their past motor cycling experience or the cubic capacity of the motor cycle. This contrasts with previous observations by Namdaran & Elton (1988). However, it is dependent on length of experience as a motor cycle messenger.

Although the terms of contract differ between the many agencies who employ couriers, the majority of riders are self-employed and on piece work. Speed seems to be of the essence; driving between slow moving traffic at speed, they are particularly vulnerable to cars changing lanes, car doors being opened in front of them, and pedestrians crossing between lines of stationary cars.

Fortunately, over two-thirds of the injuries were relatively minor, but just over one in ten was sufficiently severe to require in-patient treatment, thus confirming the very real risks involved.

A voluntary code of conduct was launched jointly by the City of London and Westminster Road Safety Officers. This initiative supported a mandatory training programme with instruction in motor cycle maintenance, and advice on protective clothing. However, only four of the couriers interviewed had attended such a course.

Recently, with the advent of bicycle couriers, the problem in terms of the numbers at risk, is likely to get worse, In 1989, three cycle couriers were killed in the City

of London Coroner's district alone. With the absence of legislation in both groups of riders, A&E departments should perhaps play, not only a therapeutic role, but also a preventative and advisory service by encouraging injured riders to wear suitable clothing (being both protective and reflective), to attend training courses specifically for couriers, to obtain full insurance cover, including personal injury, and to ensure the roadworthiness of their machines. In this field therefore, there is a role for the A&E department to counsel the injured. By emphasizing the value of prevention, they could perhaps make a real contribution to reducing injuries amongst these vulnerable young men. The incidence of injury that we have demonstrated is higher than is acceptable. We would therefore like to see some form of supervision to reduce accidents in this demonstrably dangerous occupation.

REFERENCES

Cope A. R., Driscoll P. A., Skinner D. V. & McLaughlan C. A. J. (1987) Motor cycle messenger mania. *British Medical Journal* **295**, 1560–1561.

Namdaran F. & Elton R. A. (1988) A study of reported accidents among novice motor cycle riders in a Scottish Region. *Accident Analysis and Prevention* **20** (2), 117–121.